

Appl. No. 10/632,788  
Response Dated November 17, 2005  
Reply to Office action dated August 24, 2005

### **REMARKS/ARGUMENTS**

Applicants have received and carefully reviewed the Final Office Action of the Examiner mailed August 24, 2005, and the Advisory Action mailed October 31, 2005. Claims 1, 2, 4-9, 12-23, and 25-28 have been amended, and claim 24 has been canceled. Support for the amendments is found in the specification, claims, and drawings as originally filed. No new matter has been added. Claims 1-23 and 25-28 remain pending. Reconsideration and reexamination are respectfully requested.

#### **Rejection under 35 U.S.C. § 103(a)**

Claims 1-3, 5-9, 12-15, 21-23, and 25-27 are rejected as being unpatentable over Pittman (US 6,123,147). Claims 19 and 20 are rejected as being unpatentable over Pittman in view of admitted prior art. Claims 4, 10, and 11 are rejected as being unpatentable over Pittman in view of Alford. Claims 16-18 and 24 are rejected as being unpatentable over Pittman in view of Coffman.

The Examiner asserts that Pittman discloses, in blocks 80, 88, and 90 of FIG. 3, a method and system for controlling a HVAC system having a heating unit and a cooling unit in which the heating and cooling units are both operated if the room temperature is below the set point temperature and the humidity is above the humidity set point, with the heating unit being modulated. The Examiner asserts that it would have been obvious to have eliminated the modulation of the heating unit during the dehumidification operation. Applicants respectfully traverse the rejections.

Claims 1, 2, 4-9, 12-23, and 25-28 have been amended to recite a forced air furnace, instead of a "heating unit". A forced air furnace was originally recited in dependent claim 24, which has now been canceled. With respect to claim 24, the Examiner states Coffman teaches the use of a forced air furnace in order to provide heating to an inside space. The Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify the system

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of Pittman to use a forced air furnace in order to provide the heating rather than a hot water coil in view of the teachings of Coffman of using a forced air furnace to provide heating to an inside space.

The Examiner has provided no motivational reasoning as to why one of ordinary skill in the art would modify the device and method of Pittman with the teachings of Coffman. The Examiner appears to be relying on the mere fact that the references could be combined or modified as the motivation for making the combination, which is improper. MPEP 2143.01 states that "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)." and "[a]lthough a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992)."

Applicants submit that there is no motivation for one of ordinary skill in the art to combine the teachings of Pittman and Coffman. Coffman teaches a combined heating and humidifying system in which water is sprayed into the warm air leaving the furnace. See column 1, lines 15-19 and FIG. 1. Applicants submit that neither reference provides any motivation, suggestion, or guidance for combining their teachings. The references are directed to very different systems and methods. Where Pittman teaches using a hot water coil to heat air that has been dehumidified, Coffman teaches to humidify the air leaving a forced air furnace. The methods and systems are so different in their structure, function and results, that their combination appears to be contrary to the teachings of each reference.

MPEP 2141.01 states that "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)." Applicant submits that, as a whole, Coffman teaches away from the claimed invention because Coffman teaches spraying water into the air leaving a forced air

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furnace, thus humidifying the air, while the instant claims are directed to methods and systems for dehumidifying the air.

Additionally, Pittman teaches residential air conditioning systems as providing "refrigeration coils within a plenum of a forced air furnace" and teaches the "furnace blower circulates air across the refrigeration coils, cooling the air, and distributes the cooled air through the house." See column 1, lines 13-16. Pittman then teaches his "invention provides a humidity control system that may be easily retrofitted or added to a residential air conditioning system" and that his "humidity control system uses hot water from the residential hot water heater to reheat air exiting from the refrigeration coils." See column 1, lines 40-44. Pittman thus appears to teach his system as being added to a residential HVAC system already having a furnace, but according to Pittman, the hot water heater should be used as the source of heat to reheat air exiting from the refrigeration coils and not the furnace. As such, Applicants submit that Pittman actually teaches away from the claimed method because Pittman teaches a system using hot water from the hot water heater for reheating air instead of an existing furnace, as now claimed.

The fact that Pittman teaches using a hot water heater for reheating air instead of the furnace already present in a residential HVAC system appears to be a direct teaching away from the claimed methods, and clearly teaches away from a combination with Coffman. Applicants submit that, upon reading Pittman's teaching of using the hot water heater to reheat the air, instead of the existing furnace, one of ordinary skill in the art would have no motivation for removing the very elements taught by Pittman as his invention in order to achieve the method recited in claim 1. This is particularly so since the heat output of a forced air furnace is typically very different from that of a water heater.

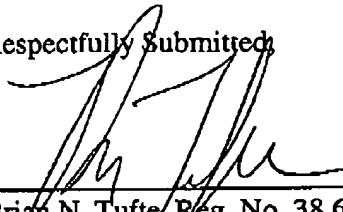
Further, even if one were to combine the teachings of Pittman and Coffman, one would not arrive at the claimed invention. A combination of Pittman and Coffman would appear to result in a system and method in which water was injected into the air leaving a furnace to add humidity, and then the air would pass over a hot water coil to remove humidity. Such a combination does not teach each and every element of the claims.

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Neither Pittman nor Coffman, alone or in combination, teaches or suggests the elements of the independent claims or the claims dependent thereon. Alford does not provide what Pittman and Coffman lack. Reconsideration and withdrawal of the rejections are respectfully requested.

In view of the foregoing, all pending claims 1-23 and 25-28 are believed to be clearly in condition for allowance. Reconsideration and reexamination are respectfully requested. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-359-9348.

Respectfully Submitted,



Date: November 17, 2005

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